FINAL DRAFT **June 18, 2003**

Grassland Wildlife Species
Suggested Conservation Practices

Purpose: To provide tools for landowners to use to restore and maintain a mosaic of vegetation structure that provides habitat for a variety of native wildlife, particularly species-at-risk, and which contributes to landscape-level habitat restoration and improvement.

Prioritizing Practices: The goal of implementing these practices is to restore ecosystem health. Every acre of land cannot be managed for every species, therefore landowners and local wildlife and land managers must decide which practice(s) are suitable for a particular parcel of land to achieve the most benefit to native at-risk wildlife. Priority should be given to practices that benefit species at risk if they are present or were present historically and can be restored. Priority species are shown in bold. All practices and planting must use native species and be appropriate to the ecological site.

Species codes

Priority Species-at-risk* *Present on three or more state species of concern lists

- **BFF Black-footed Ferret**
- **BO Burrowing Owl**
- **BTPD Black-tailed Prairie Dog**
- **FH Ferruginous Hawk**
- **LBC Long-billed Curlew**
- **LPC Lesser Prairie Chicken**
- **MP Mountain Plover**
- **SF Swift Fox**
- **SG Sage Grouse**

Secondary Species-at-risk

Present on two or more state species of special concern lists:

- BS Baird's Sparrow
- GPC Greater Prairie Chicken
- GS Grasshopper Sparrow

One state species of concern list, or one NGO list:

- SP Sprague's Pipit
- US Upland Sandpiper
- CCL Chestnut-collared Longspur
- CS Cassin's Sparrow
- LB Lark Bunting
- MCL McCown's Longspur

Conservation Practices

Brush Management (314)

- For **LPC** increase or decrease the structural density of shinnery oak, sand sagebrush, and other shrubs as appropriate for each ecological site.

or

- For BS and CS maintain or restore up to 5% woody plant cover of "local ecotype" and appropriate to the ecological site.

or

- For **SG** maintain existing sagebrush stands with a mosaic of 10 – 30% canopy cover depending season of use (winter, nesting, brood-rearing, etc.).

- For **LPC**, **BO**, **BTPD**, **SG**, and **MP** clip or saw tamarisk, cedar, locust, Russian olive, or evergreen trees to prevent encroachment into native grasslands.

- Remove or reduce distribution and density of shrubs such as tamarisk, cedar, locust, Russian olive, mesquite and sagebrush on ecological sites capable of supporting habitat for **BO**, **MP, BTPD**, and SP**;** for **LPC** use mechanical treatments and herbicides to restore habitat to historical densities for each ecological site.

- For BS and CS maintain up to 5% woody plant cover of "local ecotype" and appropriate to the ecological site where compatible with other practices.

Critical Area Planting (342)

- Establish habitat with a mixture of medium height (8-24 inches) native vegetation (grasses, forbs and legumes) and/or native shrubs of "local ecotype" appropriate to the ecological site to improve nesting, brood rearing and winter cover for **LPC**, SP, BS, GS, and US.

or

- Interseed native shrubs to densities historically found on each ecological site. These shrubs will provide perching sites for BS, LB, and CS, and restore essential **SG** habitat.

or

- Restore habitat with mixtures of low-growing native grasses, broadleaf forbs, and legumes of "local ecotype" and appropriate to the ecological site in ratios historically present in areas occupied by **BO**, **BFF**, **BTPD**, and **MP**.

Fence (382)

- Develop fencing, where appropriate and warranted, to facilitate livestock grazing systems that include rest to increase height and density of grasses for **LPC**, **LBC, SG**, SP, CCL, US, and GS; LB and nesting and brood-rearing cover, and **BO** foraging areas, during March through August.

or

- Create and maintain low vegetative condition, with up to 30% bare ground for **MP**;

optimal habitat for **BO**, **LBC**, **BTPD**, **FH**, **BFF**, and MCL, optimal lek habitat for **LPC** and GPC**,** and brood-rearing habitat for **LBC**, by grazing management that maintains vegetation at < 4 inches height.

- Exclude livestock from newly established native vegetation plantings.

Prescribed Burns (338)

- Burn vegetation at appropriate intervals to reduce woody encroachment into grasslands, facilitate invasive species control, and achieve desired habitat conditions (allow litter to accumulate between burns and to stimulate growth and vigor of native vegetation) for **LPC**, BS, SP, and US nesting and brood rearing habitat.

or

- Burn vegetation as necessary to remove residual cover and grasses to achieve <4 inches height to improve habitat or create expansion areas for **BTPD**, **BO**, **BFF**, and **MP**.

Prescribed Grazing (528A)

Design grazing plan for each individual ranch incorporating the wildlife management objectives agreed upon by the rancher and wildlife manager

- For **LPC**, **SF**, SP, GS and US, employ a rest-rotation livestock grazing system, possibly including yearlong deferment of one pasture, to increase density, height and distribution of native grasses, for **LPC** especially in nesting areas and brood-rearing areas within 5-km radius of active leks.

- Lightly or short-duration graze shortgrass pastures in summer, moderately in winter for BS, SP, LB, and CCL.

or

- Defer grazing on mixed-grass prairies to control **BTPD** expansion or new occupation.

or

- For **SG** employ a rest-rotation livestock grazing system that increases density and height of residual cover of native grasses in sagebrush stands, especially in nesting areas within 5-km radius of active leks.
- For **SG** lightly graze wet meadows and riparian edges to retain optimal forb density.

or

- Graze shortgrass and mixed-grass prairie at moderate to high levels in summer, late winter, or early spring to create and maintain **LBC**, **BTPD**, **BFF**, **BO**, **MP** and MCL habitat.

Upland Wildlife Habitat (645)

Artificial burrows

- Create burrows necessary for establishment of **BTPD** before translocation to areas without existing burrow systems. By reintroduction of BTPD provide habitat for **MP**, **BO**, and **BFF**.

Interseed forbs

- Improve **LPC**, SP, and US nesting and brood rearing cover by interseeding native forbs and legumes of "local ecotype" and appropriate to the ecological site at recommended rates.

- Improve **MP**, **BO**, and **BTPD** yearlong habitat by interseeding native forbs and legumes of "local ecotype" and appropriate to the ecological site at recommended rates.

Mowing

- Mow vegetation in ungrazed pastures to maintain or create expansion areas for **BTPD**, **BFF**, **BO**, and **MP.**

- Mow vegetation adjacent to existing **BTPD** colonies, at appropriate times of the year to minimize impacts to nesting birds, to create expansion areas for **BTPD**, **BFF**, **BO**, and **MP**.

Shrub establishment

- Re-establish shinnery oak and sand sagebrush across **LPC** range on ecological sites where appropriate

or

- Re-establish sagebrush of "local ecotype" and appropriate to the ecological site for **SG** where appropriate

or

- Establish scattered native trees and tall shrubs of "local ecotype" and appropriate to the ecological site for **FH** to use as perches (should not be used in **LPC**, **GPC**, or **SG** habitat)

Strip discing

- Improve vigor and distribution of native forbs and grasses for **LPC**, **SF**, BS, SP, CS, and US.

- Create fireguards for prescribed burning.

Vegetative Barrier (601)

- Restore native vegetation – grasses, forbs, legumes, or shrubs > 24 inches in height and appropriate to the ecological site to prevent or reduce expansion of **BTPD** colonies onto adjacent lands, or to contain animals on recently created or restored colonies.

Well (642) or

Ponds (378) or

Spring Development (574) and

Pipeline (516) and

Watering Facility (614)

- Create water sources to facilitate grazing management systems that optimize **LPC, SG** and US nesting and brood-rearing habitat. Wells should be placed greater than one mile from active **LPC** and **SG** leks.

- Design structures to provide adequate ingress and egress to water sources for all wildlife species, and to prevent accidental death of wildlife.

- Fence spillover ponds to limit grazing around pond margins for **SG** brood habitat and US habitat.

- Fence ponds and create off-site watering facility to limit grazing around pond margins for **SG** brood habitat and US habitat.